



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

|   |             |                      |                     |                  |
|---|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/436,990  | 11/09/1999  | CLAUDE LE DANTEC     | 1807.0832           | 7382             |
| 5514  | 7590        | 03/12/2004           | EXAMINER            |                  |
| FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      | CHIEU, PO LIN       |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 2615                 | 144                 |                  |
| DATE MAILED: 03/12/2004   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/436,990             | DANTEC, CLAUDE LE   |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Polin Chieu            | 2615                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 January 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4,5,7,15-18,21-26,32,38-46 and 53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 22-24 and 44-46 is/are allowed.
- 6) Claim(s) 1,4,5,15-18,21,25-26 and 38-43 is/are rejected.
- 7) Claim(s) 7 and 32 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/436,990             | DANTEC, CLAUDE LE   |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Polin Chieu            | 2615                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 January 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4,5,7,15-18,21-26,32,38-46 and 53 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 22-24 and 44-46 is/are allowed.  
 6) Claim(s) 1,4,5,15-18,21,25-26 and 38-43 is/are rejected.  
 7) Claim(s) 7 and 32 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/2/04 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 4-5, 7, 15-18, 21-26, 32, and 38-46 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claim 4 is objected to because of the following informalities: "either one of" on line 1 should be deleted. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 16 and 41 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an operation of compressing the data having a value independent of that of the information representing a physical quantity and dependent on the digital format, does not reasonably provide enablement for compressing the information representing a physical quantity. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification discloses DIF blocks containing data (information representing a physical quantity) and ID (data having a value independent of the information representing a physical quantity and dependent on the digital format) in figure 3; and the "compression" operation of removing the ID, wherein the ID is moved to a higher level of the data structure (fig. 8). The examiner does not believe that the specifications are enabling for estimating a need for compression of information representing a physical quantity (data, fig. 3); and a compression operation being performed on the information representing a physical quantity (i.e. the specification does not disclose an operation removing information from the 'data' that can be reconstituted in accordance with the limitation of claim 16). Note: if the Applicant had intended for the ID (310, fig. 3) to be interpreted as the physical quantity instead of the data (311) in claim 16, then the independent claims need to be amended because they suggest the opposite interpretation.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4-5, 15, 17, 25-26, 40, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (6,111,871).

Regarding claims 1 and 26, Chen et al discloses a digital format (an ATM network can be used to send digital data) in which information representing a physical quantity (payload) is accompanied by data having a value independent of that of the information representing a physical quantity and dependent on the digital format (header), comprising an operation of removing the data, wherein data removed in the operation of removing can be reconstituted knowing the digital format (col. 3, line 37 – col. 4, line 6).

Regarding claim 4, Chen et al discloses that the reserve data area removed during the operation of removing (col. 2, line 50 – col. 3, line 9).

Regarding claim 5, Chen et al discloses that identifiers of parts of a set of data are removed during the operation of removing (col. 2, line 50 – col. 3, line 9).

Regarding claims 15 and 40, Chen et al discloses estimating a need to reduce a quantity of data and information representing a physical quantity (i.e. locating header

redundancy; col. 2, line 50 – col. 4, line 6); and when reduction is necessary, implementing a compression method according claims 1 and 26 (please refer to the are rejection of claims 1 and 26 for the discussion of the compression method).

Regarding claim 17, Chen et al discloses that an operation of removing the data, the data having a value independent of the information representing a physical quantity and dependent on the digital format, wherein the data removed in the operation of removing can be reconstituted knowing the digital format (col. 3, line 37 – col. 4, line 6); and operation of receiving the information and the data (col. 4, lines 1-6); an operation of reconstituting data in accordance with the digital format, the reconstituted data representing the received data and being independent of the information and greater in number than the number of data items received (col. 4, lines 1-6); and an operation of organizing the reconstituted data and the information in accordance with the digital format (col. 3, line 37 – col. 4, line 6).

Regarding claim 25, Chen et al discloses an operation of determining data intended to accompany the information, having a value independent of that of the information and dependent on a digital format (col. 2, line 50 – col. 4, line 6); an operation of sending the information and the data (col. 3, lines 63-67); an operation of receiving the information representing a physical quantity, accompanied by the data (col. 4, lines 1-6); an operation of reading at least part of the received data (col. 2, lines 50-67); an operation of determining data that has been removed and which can be reconstituted knowing the digital data format, the data representing received data and having a value independent of that of the information and dependent on the digital

format, the data being greater in number than the number of received data (col. 2, line 50 – col. 4, line 6); and an operation of organizing the data and the information, the organization being in accordance with the digital format alternating data (header) and information (payload).

Regarding claim 53, Chen et al discloses providing a supplementary information item representing the digital format, in order to allow reconstitution of the data removed in the operation of removing (col. 3, lines 21-52).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 18, 21, 38-39, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al.

Regarding claims 18, 21, 42, and 43, Chen et al discloses an operation of removing data accompanying the information representing a physical quantity, the data having a value independent of the information representing a physical quantity and dependent on a digital format, wherein the data removed in the removing can be reconstituted knowing the digital format (col. 3, line 37 – col. 4, line 6); an operation of reconstituting data in accordance with the digital format, the reconstituted data representing the read data and being independent of the information and greater in

Art Unit: 2615

number than the number of received data (col. 3, line 37 – col. 4, line 6); and an operation of organizing the reconstituted data and the information, in accordance with the digital format (col. 3, line 37 – col. 4, line 6). However, Chen et al does not disclose an operation of recording and reading the information.

Chen et al only discusses transmission of data. It is well known that a transmission operation may be used in conjunction with recording and/or reproducing. For example, a reproduced signal may be transmitted to another device for recording. It would have been obvious to have an operation of recording data and information representing a physical quantity on a recording medium; and an operation of reading the information and the data on the recording medium.

It would have been obvious to have an operation of recording and reading so that the data could be stored for reading at a later time.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an operation of reading and recording in the device of Chen et al.

Regarding claims 38 and 39, Chen et al does not disclose means for reading data in the DIF format; and means for reading on an IEEE 1394 bus.

Means for reading on an IEEE 1394 bus; and means for reading data in the DIF format are well known in the art. Chen et al discloses a device that transmits data (not limited to any particular type of data). Therefore, it would have been obvious to transmit data read from an IEEE 1394 bus or data in a DIF format.

It would have been highly desirable to transmit data read from an IEEE 1394 bus or data in a DIF format so that various types of data from different types of sources can be transmitted over the ATM network, thereby making the ATM network more robust.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a means for reading data in a DIF format; and a means for reading on an IEEE 1394 bus in the device of Chen et al.

***Allowable Subject Matter***

10. Claims 22-24 and 44-46 are allowed.
11. Claims 7 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morioka et al discloses recording and reproducing devices using ATM transmission protocols.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone

numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

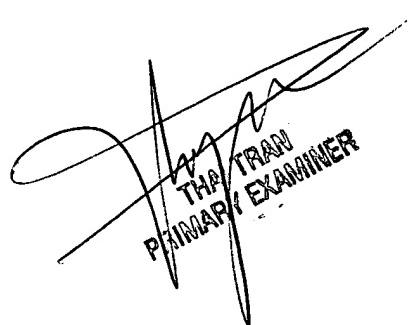
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC  
March 5, 2004



A handwritten signature in black ink, appearing to read "THA TRAN" vertically, with "PRIMARY EXAMINER" written below it in a slightly smaller script. The signature is somewhat fluid and stylized.